



WHAT IS A FIRE WALL?

A fire wall, as described by the 2000 International Building Code, *is a fire-resistance rated wall having protected openings, which restricts the spread of fire and extends continuously from the foundation to or through the roof, with sufficient structural stability under fire conditions to allow collapse of construction on either side without collapse of the wall.*

Fire walls are used to separate structures sandwiched together as seen with townhomes and garden apartments. Typically, firewalls are constructed in two configurations:

- Either one inch gypsum board used in two sections on both sides of the wall studs or two sections of gypsum butted up together
- Masonry construction in a single or double wythe (block or brick).

In townhomes and garden apartments, the rooflines of the individual structures may be offset at each address to facilitate the separation of the cockloft or attic space. Although fire walls can often be seen from the exterior if the parapets extend through the roof, they may stop at the underside of the roof deck.



At times, penetrations in fire walls are made to facilitate the installation of cables, wires, conduit tubing or pipes. Building code requires these penetrations to have rated firestopping which helps to resist the passage of flame and heat for a prescribed period of time. Of course, there are instances where precautions fail. The time of direct exposure and fire loading are factors as well as alternate routes of travel for fire such as gable vents, soffets and windows. If these inherent lapses in protection are identified through early preplanning, we may be able to assist the fire wall in limiting the lateral spread of fire.



soffet

Gable vent

window



Here are a few important points to consider while engaged in fire attack in structures with fire walls:

- Get into exposures *early* and check for extension by way of gable vents and soffets
- Visually check for extension by opening up walls and ceilings, particularly in the cockloft or attic along the fire wall
- When opening up walls and ceilings, have a charged hoseline in place for extinguishment and protection
- Refrain from using PPV until the fire is significantly under control
- If operations require a “trench cut” to control a cockloft fire or protect an adjoining exposure , make the cut on the *fire side* of the fire wall (conditions permitting)
- If master stream operations are chosen for a large volume of fire, protect the fire wall and adjoining structure by directing the stream along the *fire side* of the fire wall if conditions permit

**FAMILIARITY WITH BUILDINGS WITHIN OUR RESPECTIVE
BATTALIONS WILL INCREASE OUR KNOWLEDGE OF THE TYPE
AND LOCATION OF FIRE WALLS**

KEEP IT SAFE!



“DEDICATION TO EDUCATION”

